GMS

Year-End Forest ~~Pest~~ INSECT Summaries

1981

PREPARED IN COOPERATION WITH:

MICHIGAN DEPARTMENT OF AGRICULTURE
AND
U.S. DEPARTMENT OF AGRICULTURE, APHIS/PPQ
AND
MICHIGAN DEPARTMENT OF NATURAL RESOURCES, FORESTRY DIVISION
AND
COOPERATIVE EXTENSION SERVICE, MICHIGAN STATE UNIVERSITY

CCMS YEAR-END FOREST PEST SUMMARIES, 1981

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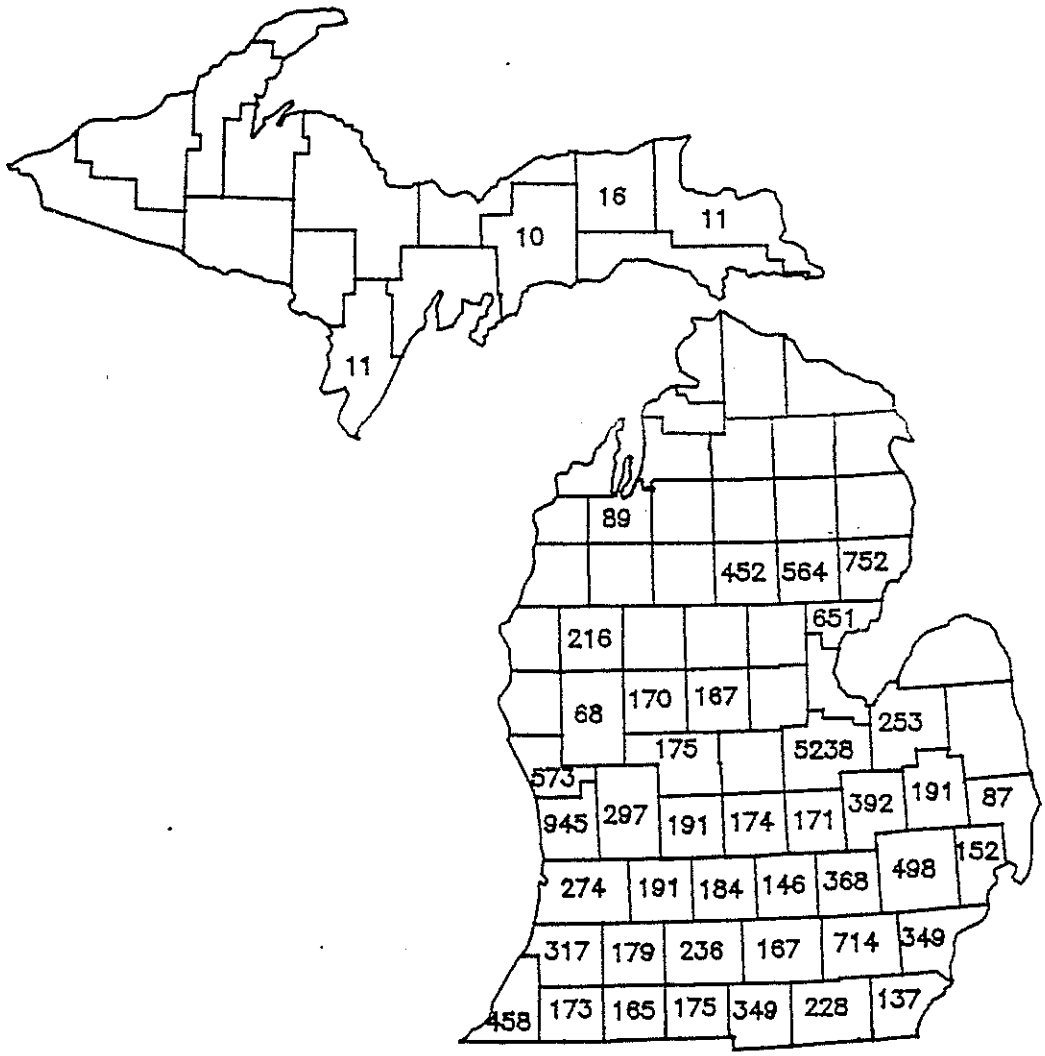
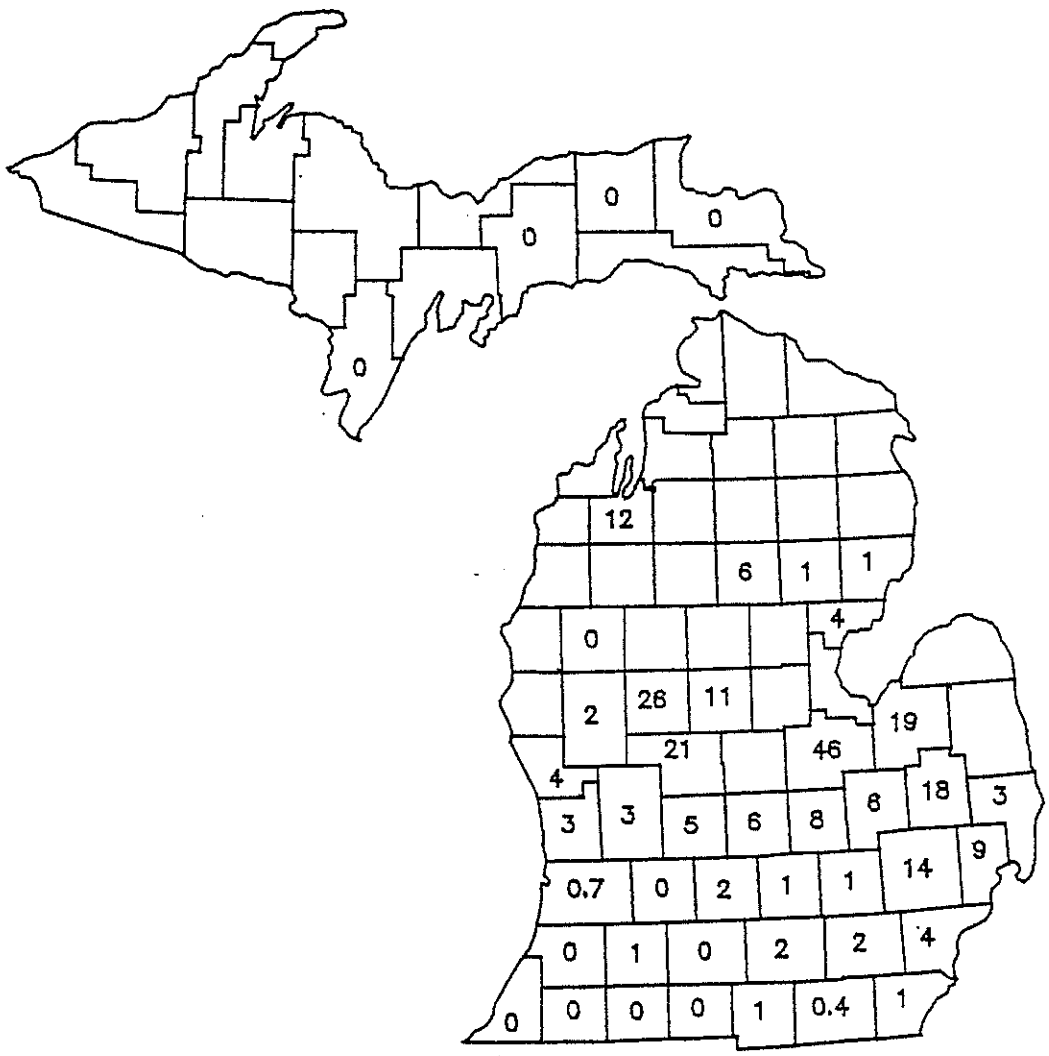


GYPSY MOTH PHEROMONE TRAPPING 1981
TOTAL TRAPS RECOVERED



GYPSY MOTH PHEROMONE TRAPPING 1981
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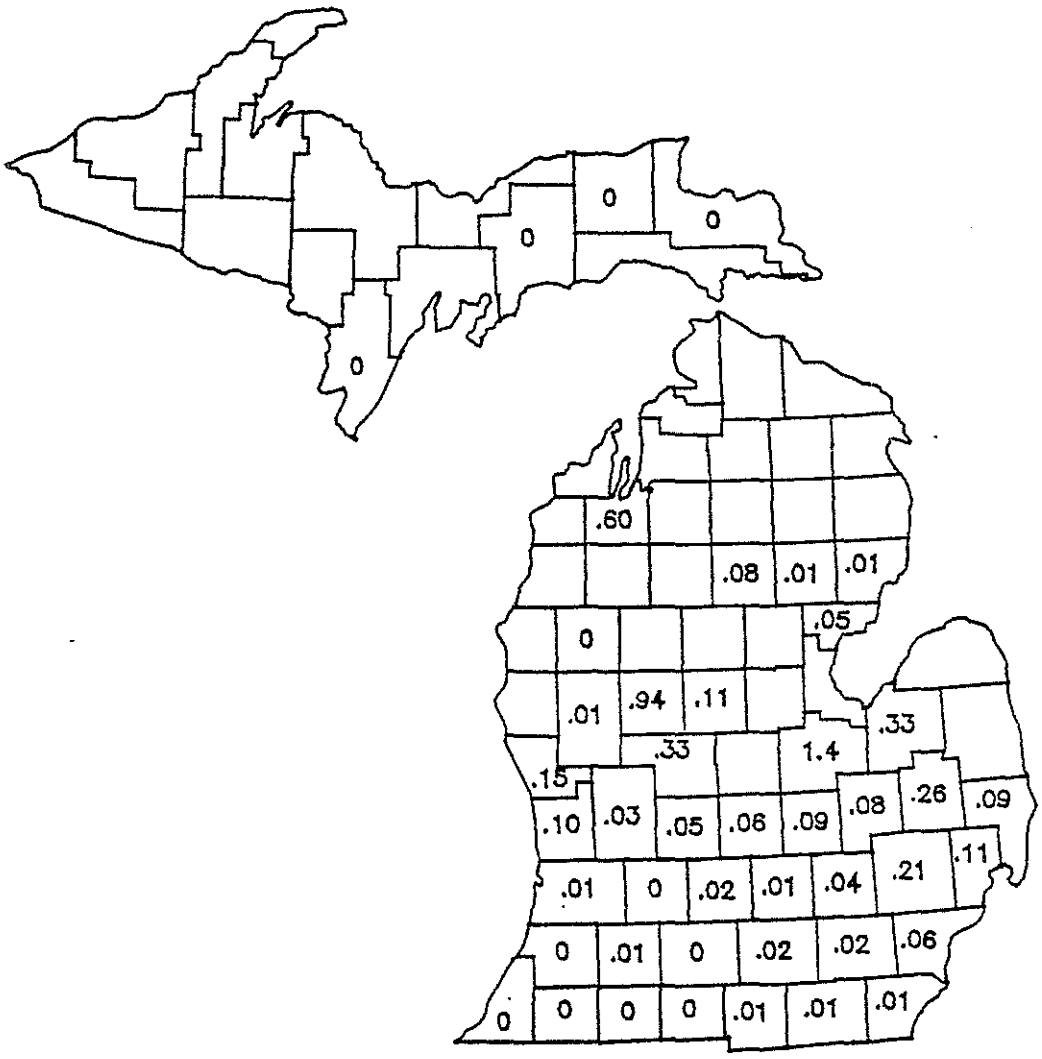

GYPSY MOTH PHEROMONE TRAPPING 1981
AVERAGE CATCH PER RECOVERED TRAP

2. Pest by County Summary

SARATOGA SPITTLEBUG

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ANTRIM	4	3	1	0	0	0	4	0	0	0	0
CHEBOYGAN	1	0	0	0	0	0	0	0	1	0	0
CRAWFORD	5	0	0	1	0	0	0	0	1	3	0
GLADWIN	2	0	1	0	1	0	2	0	0	0	0
GRAND TRAVERSE	1	0	0	1	0	0	1	0	0	0	0
KALKASKA	12	0	1	0	0	0	1	1	2	5	3
MISSAUKEE	4	0	0	0	1	0	1	1	1	0	1
MONTMORENCY	4	0	0	1	0	0	1	0	2	1	0
OGEMAW	2	0	1	1	0	0	2	0	0	0	0
OSCODA	1	0	0	1	0	0	1	0	0	0	0
OTSEGO	4	0	0	0	0	0	0	0	2	2	0
PRESQUE ISLE	5	0	0	0	0	0	0	0	2	3	0
WEXFORD	3	0	0	0	1	0	2	0	0	1	0
Total	48	3	4	5	3	0	15	2	11	15	4

SPITTLEBUG

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ALPENA	1	0	0	0	0	0	0	1	0	0	0
INGHAM	1	0	0	0	1	0	1	0	0	0	0
MONTMORENCY	5	0	0	5	0	0	0	0	4	0	0
Total	7	0	0	5	1	0	1	1	4	0	0

GYPSY MOTH

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
GRATIOT	1	0	0	0	0	1	0	0	1	0	0
Total	1	0	0	0	0	1	0	0	1	0	0

JACK PINE BUDWORM

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
CLARE	6	0	0	0	3	3	0	0	1	5	0
CRAWFORD	5	0	0	4	1	0	0	2	0	1	0
GLADWIN	2	0	1	0	0	1	0	0	1	1	0
GRAND TRAVERSE	4	0	0	0	4	0	0	0	0	4	0
IRON	1	0	0	1	0	0	0	0	1	0	0
KALKASKA	8	0	0	5	3	0	0	0	2	0	3
LAKE	2	0	0	0	2	0	0	0	0	0	0
LEELANAU	2	0	2	0	0	0	0	2	0	0	0
MONTMORENCY	8	0	2	5	1	0	0	0	1	3	0
OGEMAW	1	0	0	1	0	0	0	0	0	0	0
OSCODA	1	0	0	1	0	0	0	0	0	1	0
WEXFORD	2	0	0	1	1	0	0	0	1	1	0
Total	42	0	5	18	15	4	0	4	7	16	3

SPRUCE BUDWORM

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
DICKINSON	1	0	0	0	1	0	0	0	0	1	0
GRAND TRAVERSE	1	0	0	0	0	1	0	0	0	0	1
Total	2	0	0	0	1	1	0	0	0	1	1

TORTRICID MOTH

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
MONTMORENCY	1	0	0	1	0	0	0	0	0	1	0
Total	1	0	0	1	0	0	0	0	0	1	0

TWO-LINED CHESTNUT BORER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
CHIPPEWA	3	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	0	0	0	0	0	0	0

PINE SPITTLEBUG

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ALGER	1	0	0	1	0	0	0	0	1	0	0
CLARE	3	0	0	0	3	0	0	3	0	0	0
CRAWFORD	5	0	1	1	3	0	1	1	1	0	2
GLADWIN	2	0	1	1	0	0	0	2	0	0	0
GRAND TRAVERSE	4	0	1	2	0	1	0	3	1	0	0
KALKASKA	7	0	1	4	2	0	0	2	4	1	0
LEELANAU	2	0	0	2	0	0	0	2	0	0	0
MONTMORENCY	1	0	0	0	1	0	1	0	0	0	0
OSCODA	1	0	0	1	0	0	1	0	0	0	0
OTTAWA	1	0	0	0	0	1	0	0	0	0	1
ROSCOMMON	2	0	0	2	0	0	0	0	1	1	0
SCHOOLCRAFT	2	0	0	2	0	0	0	0	1	0	1
Total	31	0	4	16	9	2	3	13	9	2	4

LOCUST LEAFMINER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
LIVINGSTON	2	0	0	0	0	2	0	1	0	0	1
Total	2	0	0	0	0	2	0	1	0	0	1

EUROPEAN PINE SAWFLY

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
MISSAUKEE	4	0	2	2	0	0	0	0	0	0	4
ROSCOMMON	1	0	0	1	0	0	0	0	0	0	1
Total	5	0	2	3	0	0	0	0	0	0	5

FALL WEBWORM

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
SHIAWASSEE	1	0	1	0	0	0	0	0	1	0	0
Total	1	0	1	0	0	0	0	0	1	0	0

FOREST TENT CATERPILLAR

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
HOUGHTON	1	0	0	1	0	0	0	0	0	1	0
Total	1	0	0	1	0	0	0	0	0	1	0

WHITE PINE WEEVIL

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ALPENA	2	0	0	1	1	0	0	0	0	0	2
CRAWFORD	3	0	0	1	2	0	0	0	0	3	0
KALKASKA	5	0	2	1	2	0	0	0	1	1	2
LAKE	4	0	2	2	0	0	0	1	0	1	0
MONTMORENCY	12	0	0	9	1	0	0	0	1	7	1
OGEMAW	1	0	0	0	0	1	0	0	0	1	0
OTSEGO	1	0	0	1	0	0	0	0	1	0	0
Total	28	0	4	15	6	1	0	1	3	13	5

ZIMMERMAN PINE MOTH

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ALCONA	12	0	8	3	1	0	0	8	0	3	1
KALKASKA	3	0	1	1	1	0	0	0	2	1	0
WEXFORD	2	0	0	2	0	0	0	0	0	1	0
Total	17	0	9	6	2	0	0	8	2	5	1

BASSWOOD LEAFROLLER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
BENZIE	1	0	0	0	1	0	0	0	0	0	1
KALKASKA	2	0	0	0	2	0	0	0	0	1	1
Total	3	0	0	0	3	0	0	0	0	1	2

ELM SPANWORM

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
LUCE	1	0	0	0	1	0	0	0	0	1	0
MONTMORENCY	1	0	0	0	0	1	0	0	0	0	1
Total	2	0	0	0	1	1	0	0	0	1	1

PITCH BLISTER MOTH

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ALPENA	1	0	0	1	0	0	0	0	0	1	0
CRAWFORD	3	0	0	3	0	0	0	0	0	0	0
MONTMORENCY	6	0	0	6	0	0	0	0	1	0	0
OGEMAW	1	0	0	1	0	0	0	0	0	0	0
Total	11	0	0	11	0	0	0	0	1	1	0

ANOMALA BEETLE

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ANTRIM	1	0	0	1	0	0	0	0	1	0	0
KALKASKA	1	0	0	0	0	1	0	0	0	1	0
OGEMAW	1	0	0	1	0	0	0	0	1	0	0
Total	3	0	0	2	0	1	0	0	2	1	0

EASTERN PINE SHOOT BORER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ALCONA	12	0	6	3	1	0	0	6	0	3	1
WEXFORD	1	0	0	1	0	0	0	0	1	0	0
Total	13	0	6	4	1	0	0	6	1	3	1

EASTERN TENT CATERPILLAR

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
EATON	1	0	0	1	0	0	0	0	0	1	0
GRATIOT	1	0	0	1	0	0	0	0	0	1	0
KALAMAZOO	1	0	0	0	0	1	0	0	0	0	1
Total	3	0	0	2	0	1	0	0	0	2	1

LINDEN LOOPER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
BENZIE	1	0	1	0	0	0	0	0	0	1	0
LUCE	2	0	0	0	2	0	0	0	0	2	0
Total	3	0	1	0	2	0	0	0	0	3	0

OAK LEAFROLLER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
CHIPPEWA	3	0	0	0	0	0	0	0	0	3	0
MONTMORENCY	1	0	0	1	0	0	0	0	1	0	0
Total	4	0	0	1	0	0	0	0	1	3	0

PINE NEEDLE SCALE

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
KENT	1	0	0	1	0	0	0	0	1	0	0
Total	1	0	0	1	0	0	0	0	1	0	0

EASTERN GALL RUST

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
CLARE	3	0	0	0	3	0	0	0	3	0	0
CRAWFORD	1	0	0	1	0	0	0	1	0	0	0
GRAND TRAVERSE	1	0	0	0	0	0	0	0	0	0	0
KALKASKA	2	0	1	1	0	0	0	0	0	1	0
MONTMORENCY	6	0	2	4	0	0	0	0	1	0	0
Total	13	0	3	6	3	0	0	1	4	1	0

PINE ROOT COLLAR WEEVIL

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
GRAND TRAVERSE	1	0	0	0	1	0	0	0	1	0	0
KALKASKA	1	0	0	1	0	0	0	0	0	0	1
KENT	1	0	0	1	0	0	0	0	0	0	1
Total	3	0	0	2	1	0	0	0	1	0	2

RED HEADED PINE SAWFLY

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
MACKINAC	1	0	0	0	0	1	0	0	0	1	0
ROSCOMMON	1	0	0	0	0	1	0	0	0	0	1
Total	2	0	0	0	0	2	0	0	0	1	1

RED-HUMPED OAKWORM

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
GLADWIN	1	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	0	0	0

UNKNOWN DISEASE

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
ANTRIM	1	0	0	0	0	0	0	0	0	0	0
SCHOOLCRAFT	1	0	0	0	0	0	0	0	1	0	0
Total	2	0	0	0	0	0	0	0	1	0	0

ROT (ROOT,STALK,EAR)

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
CHIPPEWA	3	0	0	0	0	0	0	0	0	0	0
LEELANAU	1	0	1	0	0	0	0	0	1	0	0
Total	4	0	1	0	0	0	0	0	1	0	0

LEAF BLISTER

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
KENT	1	0	0	0	0	0	0	0	0	1	0
Total	1	0	0	0	0	0	0	0	0	1	0

JACK PINE TIP MOTH

County	Number of Reports	Frequency of Observed Abundance Ratings					Frequency of Observed Damage Ratings				
		Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
CRAWFORD	3	0	0	3	0	0	0	0	0	0	0
KALKASKA	2	0	0	2	0	0	0	0	0	0	0
LAKE	3	0	1	2	0	0	0	0	0	0	0
MONTMORENCY	11	0	0	10	1	0	0	0	0	8	0
OGEMAW	1	0	0	1	0	0	0	0	0	0	0
Total	20	0	1	18	1	0	0	0	0	8	0

3. Regional Pest Summary: Number of Acres Affected

Region 1 Pest Summary

Pest	Crop	Pest Abundance Number of Acres in Each Category					Pest Specific Damage: Number of Acres in Each Category					Total Stands Affected
		None	Few	Common	Abund.	Extr.	None	Trace	Light	Moder.	Heavy	
FOREST TENT CATERPIL	UNSPECIFIED	0	0	0	0	0	0	0	0	0	0	1
JACK PINE BUDWORM	JACK PINE	0	0	0	0	0	0	0	0	0	0	1
LINDEN LOOPER	MAP.-BEECH-BRCH	0	0	0	30	0	0	0	0	30	0	2
OAK LEAFROLLER	RED OAK	0	0	0	0	0	0	0	0	6	0	3
RED HEADED PINE SAWF	RED PINE	0	0	0	0	20	0	0	0	20	0	1
SPRUCE BUDWORM	BALSAM FIR	0	0	0	0	0	0	0	0	0	0	1
TNC-LINED CHESTNUT B	RED OAK	0	0	0	0	0	0	0	0	0	0	3
ELM SPANWORM	MAP.-BEECH-BRCH	0	0	0	15	0	0	0	0	15	0	1
PINE SPITTLEBUG	JACK PINE	0	0	0	0	0	0	0	0	0	0	2
	WHITE PINE	0	0	0	0	0	0	0	0	0	0	1
UNKNOWN DISEASE	RED PINE	0	0	0	0	0	0	0	10	0	0	1
ROT (ROOT,STALK,EAR)	RED OAK	0	0	0	0	0	0	0	0	0	0	3

Region 2 Pest Summary

Pest	Crop	Pest Abundance Number of Acres in Each Category					Pest Specific Damage Number of Acres in Each Category					Total Stands Affected
		None	Few	Common	Abund.	Extr.	None	Trace	Light	Moder.	Heavy	
ANOMALA BEETLE	RED PINE	0	0	89	0	40	0	0	89	40	0	3
EASTERN PINE SHOOT B	RED PINE	0	127	75	3	0	0	127	46	29	3	13
EASTERN TENT CATERPI	CHERRY-WILD,CHK	0	0	0	0	0	0	0	0	0	0	2
	UNSPECIFIED	0	0	0	0	0	0	0	0	0	0	1
EUROPEAN PINE SAWFLY	RED PINE	0	50	160	0	0	0	0	0	0	210	5
FALL WEBWORM	UNSPECIFIED	0	0	0	0	0	0	0	0	0	0	1
GYPSY MOTH	OAK ASSOCIATION	0	0	0	0	25	0	0	25	0	0	1
JACK PINE BUDWORM	JACK PINE	0	145	1673	1808	152	0	335	220	2629	286	39
	WHITE PINE	0	0	19	0	0	0	0	0	0	0	1
	RED PINE	0	0	12	0	0	0	0	12	0	0	1
LINDEN LOOPER	BASSWOOD	0	0	0	0	0	0	0	0	0	0	1
OAK LEAFROLLER	RED OAK	0	0	20	0	0	0	0	20	0	0	1
PINE NEEDLE SCALE	SCOTCH PINE	0	0	1	0	0	0	0	1	0	0	1
PINE ROOT COLLAR WEE	JACK PINE	0	0	0	360	0	0	0	360	0	0	1
	RED PINE	0	0	25	0	0	0	0	0	0	25	1
	SCOTCH PINE	0	0	1	0	0	0	0	0	0	1	1
RED HEADED PINE SAWF	JACK PINE	0	0	0	0	40	0	0	0	0	40	1
RED-HUMPED OAKWORM	JACK PINE	0	0	0	0	0	0	0	0	0	0	1
SARATOGA SPITTLEBUG	RED PINE	173	88	46	90	0	409	83	430	869	209	43
	JACK PINE	0	0	366	30	0	350	0	0	0	0	4
	WHITE SPRUCE	0	0	40	0	0	40	0	0	0	0	1
SPITTLEBUG	JACK PINE	0	0	64	0	0	0	15	55	0	0	6
	DOGWOOD	0	0	0	5	0	5	0	0	0	0	1
SPRUCE BUDWORM	WHITE SPRUCE	0	0	0	0	80	0	0	0	0	80	1

Region 2 Pest Summary

Pest	Crop	Pest Abundance Number of Acres in Each Category					Pest Specific Damage: Number of Acres in Each Category					Total Stands Affected
		None	Few	Common	Abund.	Extr.	None	Trace	Light	Moder.	Heavy	
TORTRICID MOTH	BIGTOOTH ASPEN	0	0	20	0	0	0	0	0	20	0	1
WHITE PINE WEEVIL	JACK PINE	0	239	318	199	11	0	39	73	300	236	27
	WHITE PINE	0	0	0	0	0	0	0	0	0	0	1
ZIMMERMAN PINE MOTH	RED PINE	0	250	146	34	0	0	213	62	106	3	17
BASSWOOD LEAFROLLER	BASSWOOD	0	0	0	200	0	0	0	0	160	40	3
ELM SPANWORM	RED OAK	0	0	0	0	20	0	0	0	0	20	1
PITCH BLISTER MOTH	JACK PINE	0	0	213	0	0	0	0	19	15	0	10
	WHITE PINE	0	0	19	0	0	0	0	0	0	0	1
PINE SPITTLEBUG	JACK PINE	0	150	1047	1126	20	960	697	686	0	0	23
	SCOTCH PINE	0	10	130	0	0	0	0	10	40	90	5
LOCUST LEAFMINER	BLACK LOCUST	0	0	0	0	3	0	2	0	0	1	2
JACK PINE TIP MOTH	JACK PINE	0	38	404	19	0	0	0	0	88	0	20
PEST = 1629	RED PINE	0	0	0	0	0	0	0	0	111	0	3
SUSPECTED EXOTIC PES	RED PINE	0	0	116	0	0	0	0	116	0	0	2
	JACK PINE	0	40	0	0	0	0	0	40	0	0	1
	WHITE SPRUCE	0	0	0	40	0	0	0	0	40	0	1
UNKNOWN DISEASE	RED PINE	0	0	0	0	0	0	0	0	0	0	1
ROT (ROOT,STALK,EAR)	JACK PINE	0	40	0	0	0	0	0	40	0	0	1
LEAF BLISTER	RED OAK	0	0	0	0	0	0	0	0	0	0	1
EASTERN GALL RUST	JACK PINE	0	58	269	120	0	0	200	139	40	0	12

Commonly Reported Forest Pests and Relative Frequency of
their Observed Abundance and Damage Ratings by Crop

RED PINE
(67 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
SARATOGA SPITTLEBUG	43	64.2	7	9	2	5	0	26	5	26	35	9
ZIMMERMAN PINE MOTH	17	25.4	0	53	35	12	0	0	47	12	29	6
EASTERN PINE SHOOT BORER	13	19.4	0	46	31	8	0	0	46	8	23	8
EUROPEAN PINE SAWFLY	5	7.5	0	40	60	0	0	0	0	0	0	100
ANOMALA BEETLE	3	4.5	0	0	67	0	33	0	0	67	33	0
SUSPECTED EXOTIC PEST	2	3.0	0	0	100	0	0	0	0	100	0	0
PINE ROOT COLLAR WEEVIL	1	1.5	0	0	100	0	0	0	0	0	0	100
JACK PINE BUDWORM	1	1.5	0	0	100	0	0	0	0	100	0	0
DISEASE												
UNKNOWN DISEASE	2	3.0	0	0	0	0	0	0	0	50	0	0

JACK PINE
(60 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
JACK PINE BUDWORM	39	65.0	0	13	38	38	10	0	10	13	41	8
WHITE PINE WEEVIL	27	45.0	0	15	56	22	4	0	4	11	48	19
PINE SPITTLEBUG	23	38.3	0	13	48	35	4	9	57	35	0	0
JACK PINE TIP MOTH	20	33.3	0	5	90	5	0	0	0	0	40	0
PITCH BLISTER MOTH	10	16.7	0	0	100	0	0	0	0	10	10	0
SPITTLEBUG	6	10.0	0	0	83	0	0	0	17	67	0	0
SARATOGA SPITTLEBUG	3	5.0	0	0	67	33	0	67	0	0	0	0
RED HEADED PINE SAWFLY	1	1.7	0	0	0	0	100	0	0	0	0	100
PINE ROOT COLLAR WEEVIL	1	1.7	0	0	0	100	0	0	0	100	0	0
DISEASES												
EASTERN GALL RUST	12	20.0	0	25	42	25	0	0	8	33	8	0
ROT (ROOT,STALK,EAR)	1	1.7	0	100	0	0	0	0	0	100	0	0

RED OAK
(5 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
OAK LEAFROLLER	4	80.0	0	0	25	0	0	0	0	25	75	0
TWO-LINED CHESTNUT BORER	3	60.0	0	0	0	0	0	0	0	0	0	0
ELM SPANWORM	1	20.0	0	0	0	0	100	0	0	0	0	100
DISEASES												
ROT (ROOT,STALK,EAR)	3	60.0	0	0	0	0	0	0	0	0	0	0
LEAF BLISTER	1	20.0	0	0	0	0	0	0	0	0	100	0

WHITE SPRUCE
(2 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
SPRUCE BUDWORM	1	50.0	0	0	0	0	100	0	0	0	0	100
SARATOGA SPITTLEBUG	1	50.0	0	0	100	0	0	100	0	0	0	0

WHITE PINE
(2 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
PITCH BLISTER MOTH	1	50.0	0	0	100	0	0	0	0	0	0	0
WHITE PINE WEEVIL	1	50.0	0	0	0	0	0	0	0	0	0	0
JACK PINE BUDWORM	1	50.0	0	0	100	0	0	0	0	0	0	0
PINE SPITTLEBUG	1	50.0	0	0	100	0	0	0	0	0	0	100

SCOTCH PINE
(7 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
PINE SPITTLEBUG	5	71.4	0	20	60	0	20	0	0	20	20	60
PINE ROOT COLLAR WEEVIL	1	14.3	0	0	100	0	0	0	0	0	0	100

BIGTOOTH ASPEN
(1 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
TORTRICID MOTH	1	100.0	0	0	100	0	0	0	0	0	100	0

MAP.-BEECH-BRCH
(1 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
LINDEN LOOPER	2	200.0	0	0	0	100	0	0	0	0	100	0
ELM SPANWORM	1	100.0	0	0	0	100	0	0	0	0	100	0

OAK ASSOCIATION
(1 Total Forms)

Pest	Number of Forms	Percent of Forms	Relative Frequency (%) of Observed Abundance Ratings					Relative Frequency (%) of Observed Damage Ratings				
			Nn	Fw	Cm	Ab	Ex	Nn	Tr	Lt	Md	Hv
INSECTS												
GYPSY MOTH	1	100.0	0	0	0	0	100	0	0	100	0	0